FIGURE 1. Schematic diagram of 2-phase intensive cultur cycle for marine copepod, *Parvocalanus* sp.

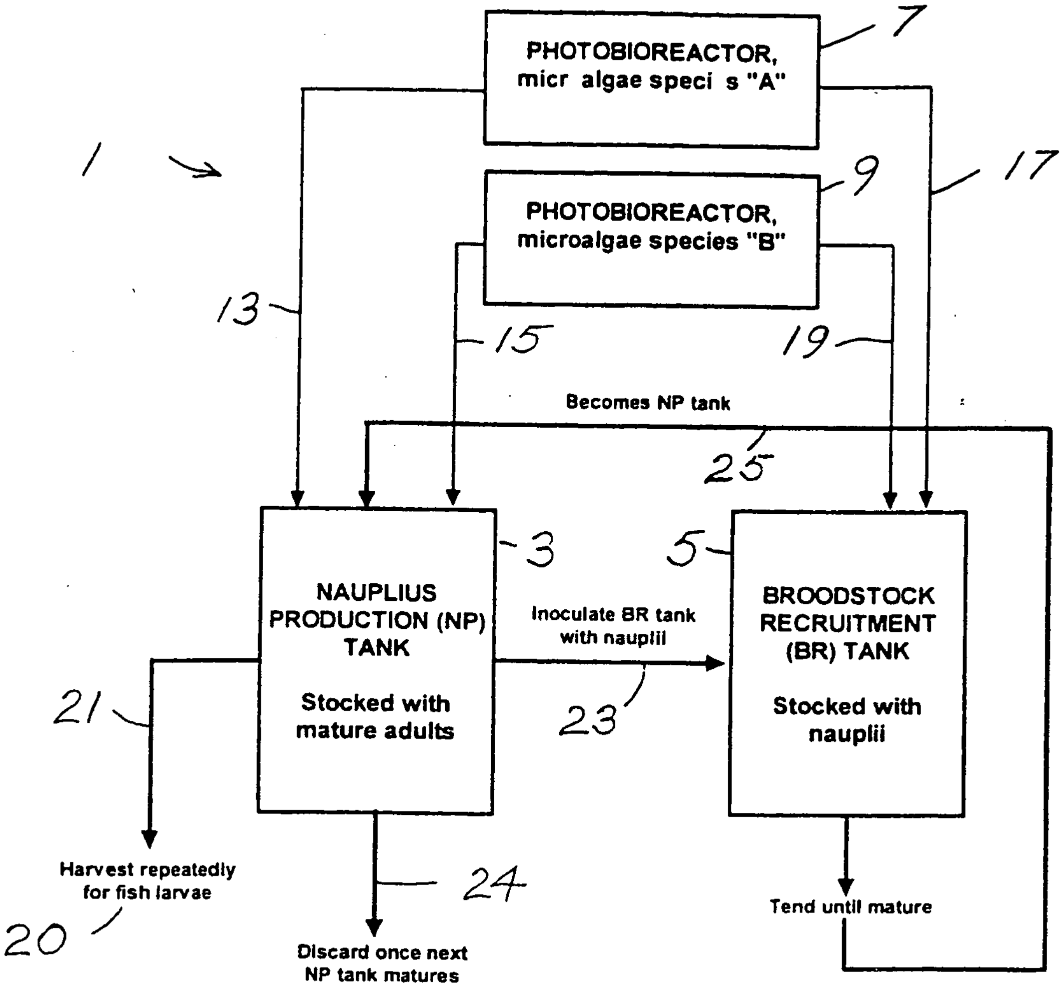

PHOTOBIOREACTOR, micr algae speci s "A"
7
1
PHOTOBIOREACTOR, microalgae species "B"
9
17
13
15
19
Becomes NP tank
25
NAUPLIUS PRODUCTION (NP) TANK
Stocked with mature adults
3
5
BROODSTOCK RECRUITMENT (BR) TANK
Stocked with nauplii
Inoculate BR tank with nauplii
21
23
24
Harvest repeatedly for fish larvae
20
Discard once next NP tank matures
Tend until mature

Figure 2. Comparative survival and growth rates of red snapper (*Lutjanus campechanus*) larvae receiving microalgae, with/without addition of cultured rotifers or copepods, *Parvocalanus* sp

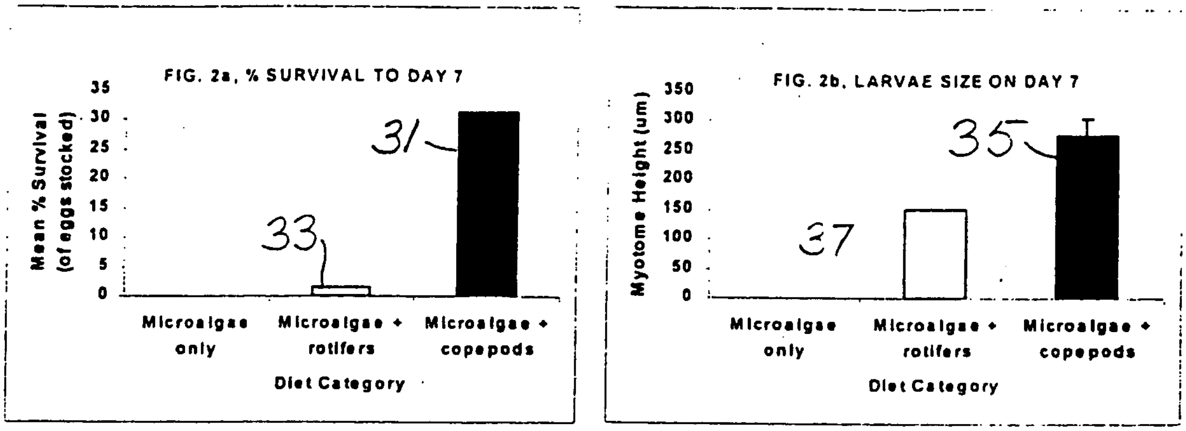
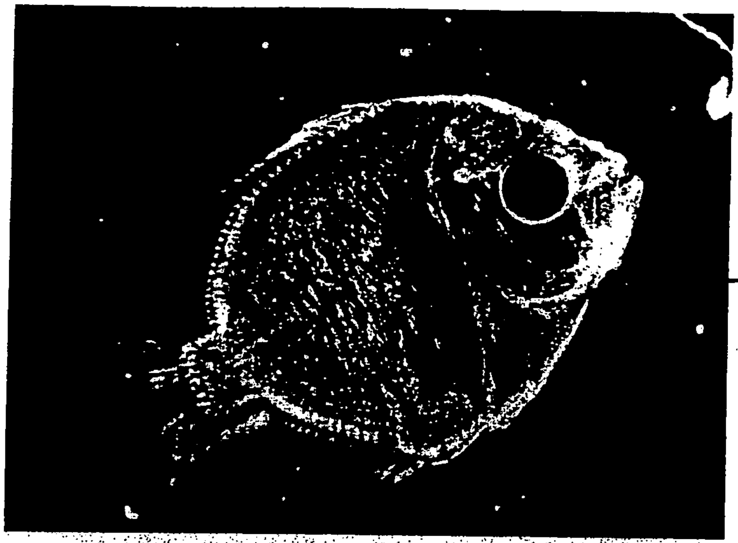
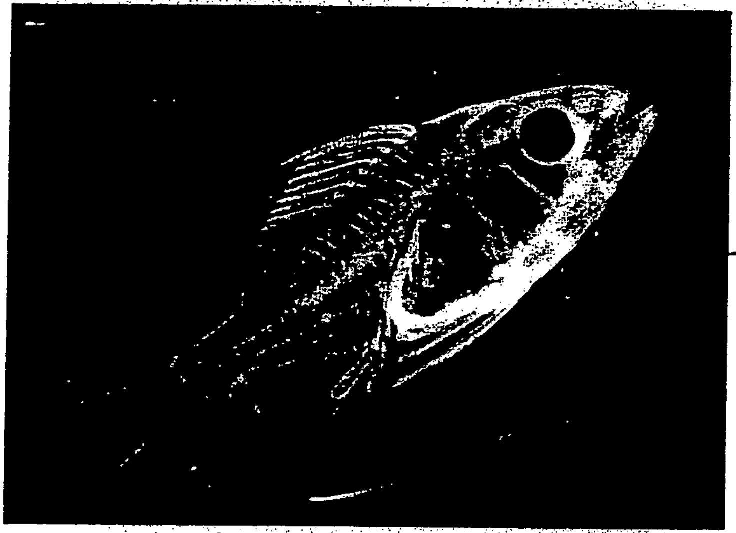


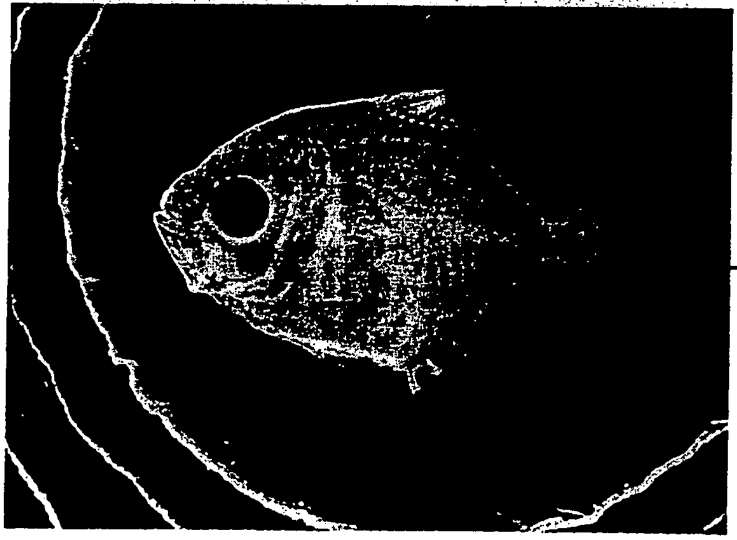
Figure 3. Photomicrographs of tropical ~~marine~~ fish larvae reared using intensively cultured *Parvocalanus* sp copepods.



3a. 28 day old flame angelfish (*Centropyge loriculus*)



3b. 25 day old red snapper (*Lutjanus campechanus*)



3c 28 day old bluefin trevally (*Caranx melampygus*)

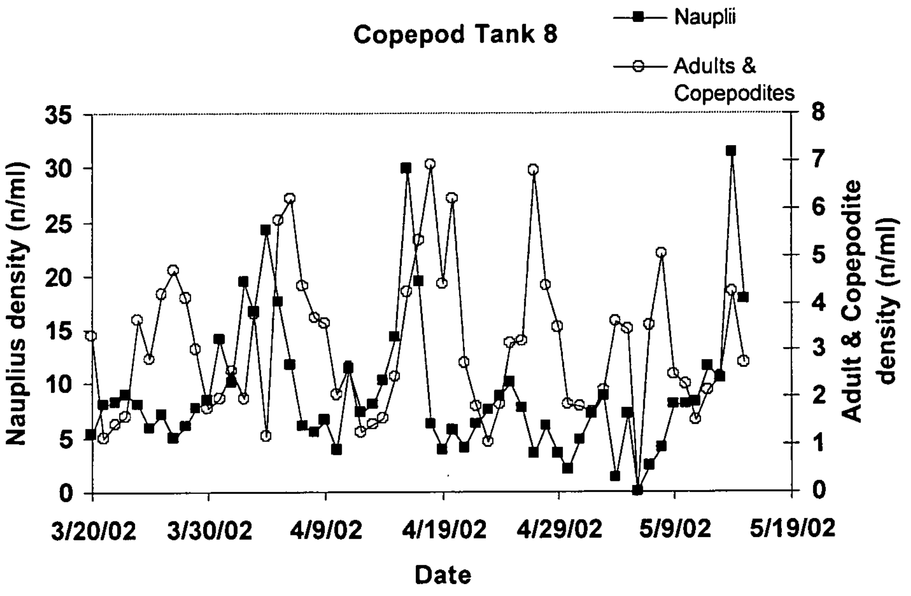


Figure 4. Temporal change in densities of *Parvocalanus* sp adults (copepodites and nauplii) reared in 400L culture volume, using a combined diet of *Chaetoceros* sp (200,000 cells ml^{-1}) and *Isochrysis* sp (100,000 cells ml^{-1}).

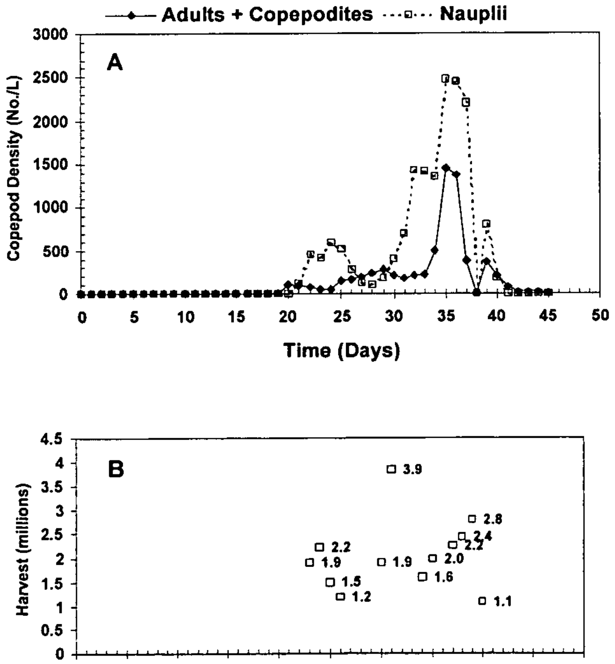


Figure 5-a. Temporal profile of copepod density (adults/copepodites and nauplii) in a 30,000L culture tank - Trial #1.

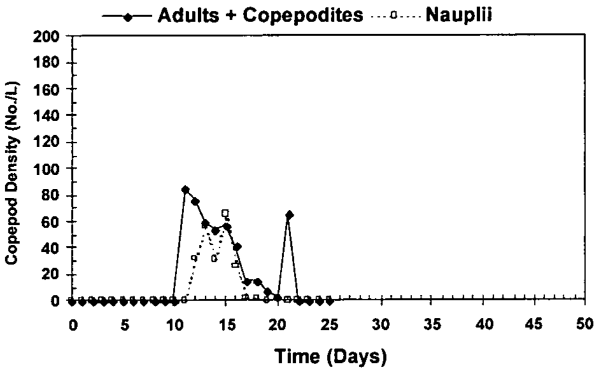


Figure.5-b. Temporal profile of copepod density (adults/copepodites and nauplii) in a 30,000L culture tank -Trial #2.

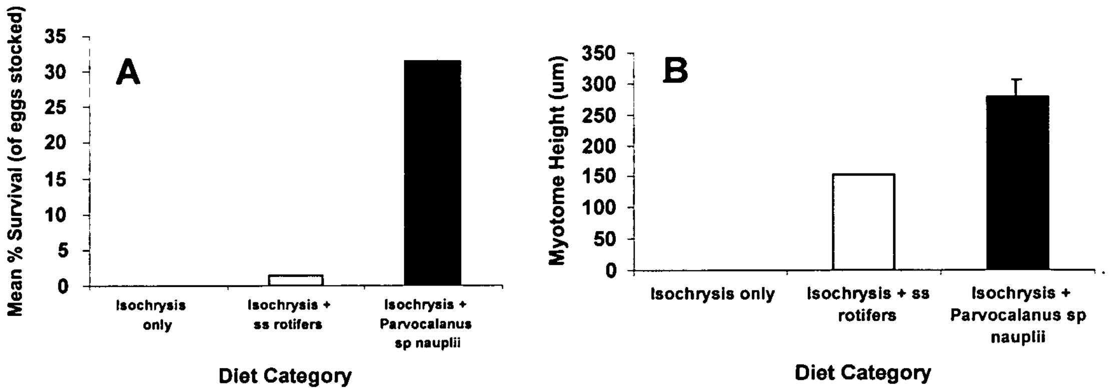


Figure 6. Mean percentage survival to day 7 ph for red snapper larvae receiving only microalgae, or microalgae plus rotifers or *Parvocalanus* sp nauplii (A) and size of red snapper larvae from the different diet groups on day 7 (B). Each value represents mean ± standard deviation of 4 replicates.

718

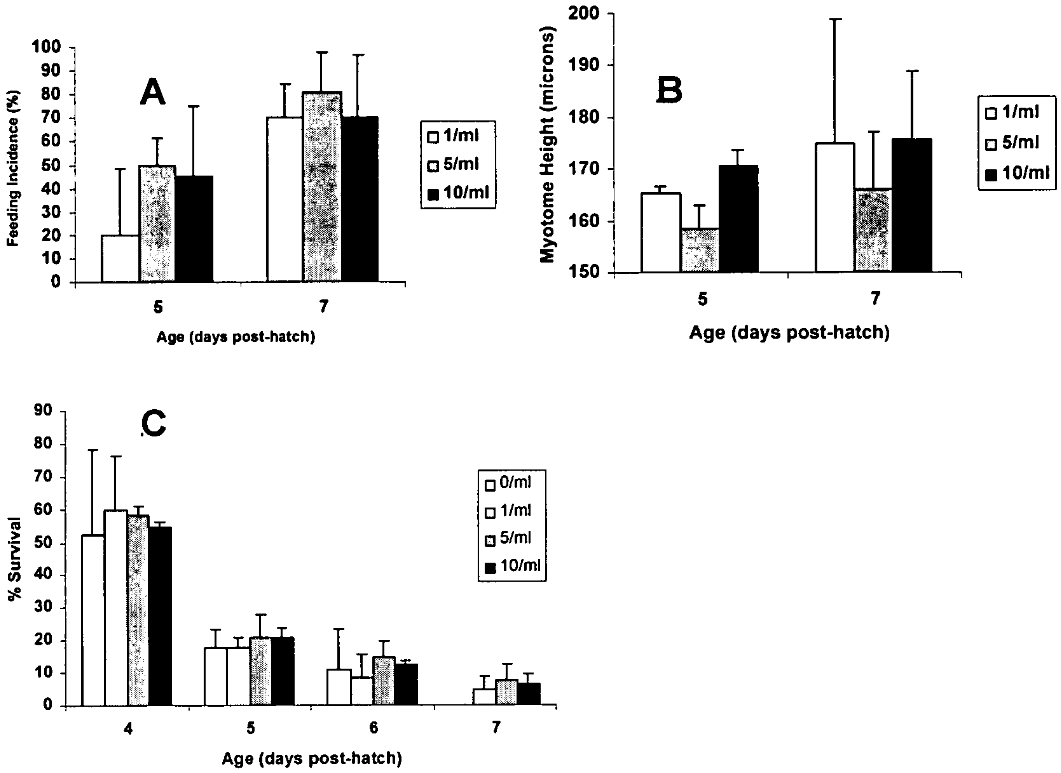


Figure 7a-c. Mean % feeding incidence (A), myotome height (B) and survival rate (C) for flame angelfish larvae offered *Parvocalanus* sp copepod nauplii at a density of 0, 1, 5, or 10 ml^{-1}. Each value represents mean ± standard deviation of 3 replicates.

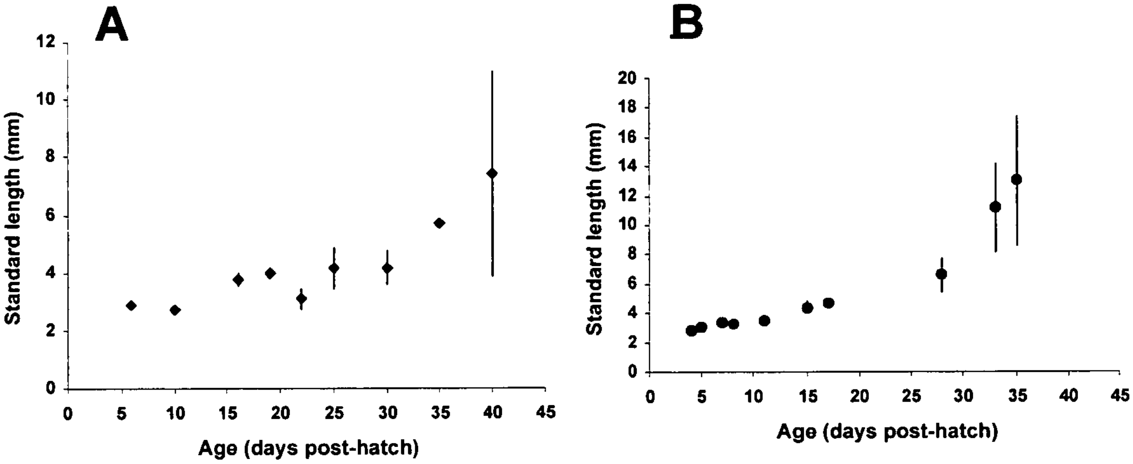


Figure 8. Mean standard length for flame angelfish (A) and bluefin trevally (B) reared using a combination of cultured marine copepods, rotifers and *Artemia*. Each value represents mean ± standard deviation (variable n).